

- 1 What is claimed is:
- 2 1. A method for fabricating an anisotropic conductive substrate comprising:
- 3 providing a back holder, the back holder having a surface with a plurality of metal pins;
- 4 forming a liquid compound on the surface of the back holder with the metal pins;
- 5 pressing the liquid compound on the back holder, the liquid compound being reshaped to
- 6 have an upper surface and a lower surface, the thickness between the upper surface and
- 7 the lower surface of the liquid compound is between $25\text{ }\mu\text{m}$ and $250\text{ }\mu\text{m}$, the metal
- 8 pins being deformed into a plurality of electrodes in the liquid compound and each
- 9 electrode has an first end and a lower end exposed from the upper surface and the
- 10 lower surfaces of the liquid compound; and
- 11 removing the back holder so that the liquid compound with the electrodes becomes an
- 12 anisotropic conductive substrate.
- 13 2. The method for fabricating an anisotropic conductive substrate as claimed in claim 1,
- 14 wherein the liquid compound is a negative photoresist.
- 15 3. The method for fabricating an anisotropic conductive substrate as claimed in claim 1,
- 16 wherein the liquid compound is a low K dielectric thermosetting material.
- 17 4. The method for fabricating an anisotropic conductive substrate as claimed in claim 3,
- 18 wherein the liquid compound is cured simultaneously during the pressing step.
- 19 5. The method for fabricating an anisotropic conductive substrate as claimed in claim 1,
- 20 wherein a removable layer is formed on the surface of the back holder in the step of
- 21 providing the back holder.
- 22 6. The method for fabricating an anisotropic conductive substrate as claimed in claim 5,
- 23 wherein the removable layer is a positive photoresist.
- 24 7. The method for fabricating an anisotropic conductive substrate as claimed in claim 1,
- 25 wherein the distribution density of the metal pins is between 10^3 mm^{-2} and 10^8 mm^{-2} in
- 26 the step of providing the back holder.
- 27 8. The method for fabricating an anisotropic conductive substrate as claimed in claim 1,

- 1 wherein the pitch between the metal pins is from 0.5 μ m to 30 μ m.
- 2 9. The method for fabricating an anisotropic conductive substrate as claimed in claim 1,
3 further comprising a step of baking the liquid compound prior to the pressing step.
- 4 10. The method for fabricating an anisotropic conductive substrate as claimed in claim 1,
5 wherein the liquid compound is transparent.
- 6 11. A method for fabricating an anisotropic conductive substrate comprising:
7 providing a back holder, the back holder having a surface with a plurality of metal pins;
8 forming a liquid compound on the surface of the back holder with the metal pins;
9 pressing the liquid compound on the back holder by a top plate and curing the liquid
10 compound simultaneously, the top plate deforming the metal pins into a plurality of
11 electrodes in the liquid compound; and
12 removing the back holder so that the liquid compound with the electrodes becomes an
13 anisotropic conductive substrate.
- 14 12. The method for fabricating an anisotropic conductive substrate as claimed in claim 11,
15 wherein the liquid compound is a negative photoresist.
- 16 13. The method for fabricating an anisotropic conductive substrate as claimed in claim 11,
17 wherein the liquid compound is transparent.
- 18 14. The method for fabricating an anisotropic conductive substrate as claimed in claim 11,
19 wherein a removable layer is formed between the metal pins and the back holder in the
20 step of providing the back holder.
- 21 15. The method for fabricating an anisotropic conductive substrate as claimed in claim 14,
22 wherein the removable layer is a positive photoresist.
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